

ABSTRACT

A weight-controlled, motorized vehicle can be accelerated in either direction, steered, or decelerated without hand controls and without repositioning of a rider situated atop the vehicle. Like a skateboard, the vehicle is normally ridden by a rider standing upon a platform on top of the vehicle with one foot in front of the other. The vehicle is propelled forward when the rider increases weight on the front portion of the platform and backward when weight is increased on the rear portion. The vehicle is steered like a skateboard, by tilting the platform from side-to-side. An improved drive system utilizes a single front drive wheel to power and steer the vehicle. The drive system eliminates need of a flexible power transmission coupling such as a U-joint or constant-velocity joint. It also eliminates need of the differential mechanism normally required for two laterally spaced drive wheels.